

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,174	06/24/2003	Shigeru Sugaya	7217/69504	9447
530 LERNER. DA	7590 09/10/2007 ERNER, DAVID, LITTENBERG,		EXAMINER	
KRUMHOLZ	& MENTLIK		ROSE, KERRI M	
600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			ART UNIT	PAPER NUMBER
			2616	
		•	MAIL DATE	DELIVERY MODE
			09/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		(X <sup>2</sup>			
	Application No.	Applicant(s)			
	10/602,174	SUGAYA, SHIGERU			
Office Action Summary	Examiner	Art Unit			
	Kerri M. Rose	2616			
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the o	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING C  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be time the second seco	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 10 A	August 2007.				
2a)⊠ This action is <b>FINAL</b> . 2b)□ Thi	This action is <b>FINAL</b> . 2b) This action is non-final.				
3) Since this application is in condition for allows	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application	n.				
4a) Of the above claim(s) is/are withdra	awn from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-19</u> is/are rejected.					
7)⊠ Claim(s) <u>20</u> is/are objected to.					
8) Claim(s) are subject to restriction and/	or election requirement.				
Application Papers					
9) The specification is objected to by the Examin	er.				
10)⊠ The drawing(s) filed on <u>24 June 2003</u> is/are: a	a)⊠ accepted or b)⊡ objected to	by the Examiner.			
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correct	- · ·				
11) The oath or declaration is objected to by the E	examiner. Note the attached Office	e Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:	n priority under 35 U.S.C. § 119(a	a)-(d) or (f).			
1. Certified copies of the priority documer					
2. Certified copies of the priority documer					
<ol> <li>Copies of the certified copies of the price</li> <li>application from the International Burea</li> </ol>	· · ·	ed in this National Stage			
* See the attached detailed Office action for a lis	, , , , , , , , , , , , , , , , , , , ,	ed			
Attachment(s)					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	4) 🔲 Interview Summar Paper No(s)/Mail D				
<ul> <li>2) Motice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>	5) Notice of Informal 6) Other:				

Application/Control Number: 10/602,174 Page 2

Art Unit: 2616

### **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments filed 8/10/2007 have been fully considered but they are not persuasive. Applicant argues that Dail considers only ATM slots when admitting a new call. If there are not sufficient ATM slots the call is denied. Dail divides the bandwidth into three sections. Both STM and ATM have a small amount of bandwidth guaranteed. The remainder of the bandwidth is put into a pool of available, unassigned bandwidth. This bandwidth may be used by either STM or ATM and is donated back to the pool by either STM or ATM. It is only if this pool is exhausted that a call is rejected, as it must be and would be in every system. A communication system does not exist that can give bandwidth to a call when no bandwidth remains. At least some of the extra, unassigned bandwidth can be deemed as having come from the STM region because it was donated to the pool from the STM region. Further, figure 7 illustrates that reserved, contention free bandwidth is available in the ATM region.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-5, 7-9, 11-14, and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Dail et al. (US 5,570,355).
- 4. In regards to claim 1 Dail discloses a system for wireless communication (col. 27 lines 3-10) having an asynchronous access region (col. 7 line 44) and a channel-time-allocation access

Application/Control Number: 10/602,174

Art Unit: 2616

region (col. 7 line 43), comprising means for initiating information communication in the asynchronous access region (col. 9 line 14-17) and for allocating channel time in excess of a predetermined transmission capacity (col. 9 line 17-20).

Page 3

- 5. In regards to claim 2, Dail discloses a system for wireless communication (col. 27 lines 3-10) comprising means for releasing channel time below a predetermined transmission capacity during a channel time allocation communication (fig. 23).
- 6. In regards to claims 3, 4, and 13 Dail discloses a wireless system (col. 27 lines 3-10), method, and computer program (col. 11 lines 9-11) comprising: request receiving means for receiving at least one of a channel time allocation request and a channel time release request from another wireless communication device in the wireless network (col. 11 lines 41-43); and frame setting means fro setting the asynchronous access region and the channel-time-allocation access region during the predetermined frame period using the received at least one of the channel time allocation request and the channel time release request (col. 11 lines 44 and 45).
- 7. In regards to claims 5, 9, 14, and 18 Dail discloses a wireless system (col. 27 lines 3-10), method, and computer program (col. 11 lines 9-11) comprising: asynchronous access control means; channel time allocation communication control means; transmission information storing means; transmission capacity determining means; and channel time request means. Figures 11, 12, and column 16 lines 34-57 illustrate the bandwidth controller and how bandwidth is divided between the requesting stations.
- 8. In regards to claims 7, 11, 16, and 19 Dail discloses a wireless system (col. 27 lines 3-10), method, and computer program (col. 11 lines 9-11) of claims 5, 9, and 14 wherein the channel time request means sends the channel time allocation request to the control station when

Art Unit: 2616

the amount of information stored in the transmission information storing means exceed the amount of information determined by the transmission capacity determined means while the channel time allocation communication control means is transmitting the information in the asynchronous access region (fig. 15 and col. 19 lines 1-13).

9. In regards to claims 8, 12, and 17 Dail discloses a wireless system (col. 27 lines 3-10), method, and computer program (col. 11 lines 9-11) of claims 5, 9, and 14 wherein the channel time request means sends the channel time release request to the control station when the amount of information stored in the transmission information storing means is below the amount of information determined by the transmission capacity determined means while the channel time allocation communication control means is transmitting the information in the channel time allocation access region (fig. 23 illustrates the release of call resources).

# Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 6, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dail et al. (US 5,570,355) in view of Lumelsky (US 2004/0166812).
- 12. In regards to claims 6, 10, and 15 Dail discloses a wireless system (col. 27 lines 3-10), method, and computer program (col. 11 lines 9-11) of claims 5, 9, and 14, but not wherein the transmission capacity of the asynchronous region is determined by dividing an overall bandwidth of the asynchronous region by a number of wireless devices forming the wireless network.

Art Unit: 2616

Lumelsky discloses determining the transmission capacity by dividing the overall capacity by the number of devices in the network in paragraph 69.

It would have been obvious to one of ordinary skill in the art to determine the capacity of the region taught by Dail using the method taught by Lumelsky because doing so provides a network that can be flexibly expanding without high costs, as disclosed by Lumelsky in paragraph 26.

### Allowable Subject Matter

13. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 10/602,174

Art Unit: 2616

Page 6

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Rose whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Thursday, 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H. To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kmr

DORIS H. TO SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600